

Serial No. 10/643,660
60246-229; 8748

REMARKS

Claims 30, 31, 38 and 39 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. Claims 30 and 38 have been amended to recite that a roller assembly adheres the film to a surface of the metal condensing flow passages. Claims 31 and 39 have been amended to recite that a polymer heater melts a plurality of pellets to form a melted polymer. The rejection has been overcome.

Claims 27-29, 32-37 and 40-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boah (US 4,953,511) in view of May (US 4,933,046). The Examiner admits that Boah does not disclose a film made of polyester, polyetherimide, polyethersulfone, polysulfone or polyimde. That Examiner states that May discloses a condenser that utilizes a polyester film as a condensing surface to enhance thermal conductivity. The Examiner states that the use of polybutylene terephthalate, polyethylene terephthalate, polyetherimide, polyethersulfone, polysulfone or polyimide is deemed to be a design consideration, and therefore the claimed invention is obvious. Applicant respectfully disagrees.

The claimed invention is not obvious. Boah does not disclose a heat exchanger component including a film made of polyester, polyetherimide, polyethersulfone, polysulfone or polyimde. May teaches a water purifying system including a condenser with two superposed sheets of flexible polyester material bonded together. The polyester is bonded together to form the heat exchanger and is not applied on a metal sheet. May does not include any metal surface, as a disclosed benefit of May is that the heat exchanger is significantly less expensive than a stainless steel or aluminum condenser (column 2, lines 18 to 20). Therefore, May does not disclose a film on a metal surface. Neither reference teaches a film of polybutylene terephthalate, polyethylene terephthalate, polyetherimide, polyethersulfone, polysulfone or polyimide applied on a metal sheet as claimed. Therefore, the references together do not teach, suggest or disclose the claimed invention. The claimed invention is not obvious.

There is also no suggestion to replace the polypropylene layer of Boah with a layer of polyester, polyetherimide, polyethersulfone, polysufone or polyimide as claimed. It is impermissible to modify a base reference in a manner that defeats the benefits achieved by the teachings of the reference. Boah teaches the use of a polypropylene layer. To eliminate the polypropylene layer and replace it with a layer of polyester, polyetherimide, polyethersulfone, polysufone or polyimide would defeat the benefits achieved by Boah. There is no support that

Serial No. 10/643,660
60246-229; 8748

using a layer of polyester, polyetherimide, polyethersulfone, polysulfone or polyimide would satisfy all of the problems solved by using the polypropylene layer of Boah or would perform in any way better than the structure already provided by Boah.

The Examiner's rejection is clearly a use of hindsight reconstruction. It is impermissible to engage in hindsight reconstruction of the claimed invention, using the applicant's structure as a template and selecting elements from the references to fill the gaps. The references themselves must provide some teaching whereby the applicant's combination would have been obvious. In re Gorman, 933 F.2d 982, 986, 18 USPO2d 1885, 1888 (Fed. Cir. 1991). There simply is no suggestion in the references, or in the prior art as a whole, that suggests the desirability of using these materials. Nothing in Boah would have led one of ordinary skill in the art to believe that Boah's polypropylene layer was in any way deficient for Boah's purposes or was in need of modification. One of ordinary skill in the art would have found no reason, suggestion, or incentive for modifying the heat exchanger of Boah other than through the luxury of hindsight accorded one who first viewed Applicant's disclosure. This is not a proper basis for a rejection under 35 U.S.C. 103. The claimed invention is not obvious, and Applicant requests that the rejection be withdrawn.

There is also no disclosure, suggestion or teaching in either reference in using a melted polymer as claimed. The Examiner states that these are product by process claims that are limited by the product itself. The Examiner continues that the heat exchanger as claimed is the same as or obvious from the heat exchanger of Boah. Applicant respectfully disagrees. The claimed invention requires a melted polymer that forms a film on a heat exchanger. Boah does not disclose, suggest or teach that the polypropylene layer is applied to the blank 61 as a melted polymer as claimed. The claims recite a material applied in a first state (a melted state) that form a second state (a film). These are structural differences. The claimed invention is not obvious, and Applicant respectfully requests that the rejection be withdrawn.

Finally, the Examiner argues that the selection of polyester, polyetherimide, polyethersulfone, polysulfone or polyimide is a design consideration, but supplies no evidence. Applicant cannot respond without the evidence, and thus ask that holding be dropped or evidence supplied. Notably, the relevant question is not whether polyester, polyetherimide, polyethersulfone, polysulfone or polyimide has ever been done anywhere. Instead the question is whether it would have been obvious to employ polyester, polyetherimide, polyethersulfone,

Serial No. 10/643,660
60246-229; 8748

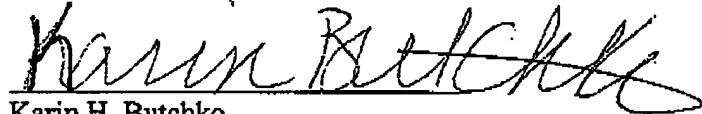
polysulfone or polyimide in the claimed environment. Clearly, it would not have been.

Additionally, claims 36-43 are not obvious because neither reference discloses, suggests or teaches a heat exchanger component including a film formed from a melted polymer that is one of polyetherimide, polyethersulfone, polysulfone and polyimide. As stated by the Examiner, Boar discloses a film of polyolefin. May discloses a film made of polyester. Neither reference alone teaches employing polyetherimide, polyethersulfone, polysulfone and polyimide, and therefore the references together do not disclose, suggest or teach employing polyetherimide, polyethersulfone, polysulfone or polyimide as a film on a metal surface as claimed. Therefore, the combination of the references cannot disclose, suggest or teach the claimed invention. Claims 36-43 are further not obvious.

Thus, claims 27-46 are in condition for allowance. No additional fees are seen to be required. If any additional fees are due, however, the Commissioner is authorized to charge Deposit Account No. 50-1482, in the name of Carlson, Gaskey & Olds, P.C., for any additional fees or credit the account for any overpayment. Therefore, favorable reconsideration and allowance of this application is respectfully requested.

Respectfully Submitted,

CARLSON, GASKEY & OLDS, P.C.


Karin H. Butchko
Registration No. 45,864
400 West Maple Road, Suite 350
Birmingham, Michigan 48009
Telephone: (248) 988-8360
Facsimile: (248) 988-8363

Dated: December 21, 2005

CERTIFICATE OF FACSIMILE

I hereby certify that this correspondence is being facsimile transmitted to the United States Patent and Trademark Office, 571-273-8300 on December 21, 2005.


Karin Butchko